Warblers have been recorded as summer birds at points far south of "Northern New England." The ascertained breeding range of the Yellow-bellied Flycatcher should also have been allowed to include the Catskills, if not a more southern point.

An important feature, of both local and general interest, is the dates of arrivals and departures of migrants at Washington, at Sing Sing, and at Cambridge, contributed respectively by Mr. C. W. Richmond, Dr. A. K. Fisher, and Mr. William Brewster. Similar records for the water birds on Long Island have been supplied by Mr. William Dutcher. A further illustration of the modern principle of co-operation is seen in the biographies, many of which have been contributed by well-known writers on birds, whose names are signed to their contributions. By far the greater number of these sketches have, however, been written by Mr. Chapman himself. They are in all cases brief, and aim to present the bird in life with especial reference to haunts, notes and habits — such facts connected with a bird's individuality as would be likely to be of assistance to the observer in the field.

The illustrations are numerous and excellent, consisting of full-page engraved half-tones, and pen and ink drawings in the text, prepared expressly for their present use. A color chart for reference in connection with the descriptions is a useful adjunct.

The book as a whole presents us with the scientific and popular in singularly harmonious union. Mr. Chapman has produced a note-worthy contribution, both to general and to educational ornithology. His volume takes rank among the authoritative works on North American birds.— E. P. B.

Minot's Land-Birds and Game-Birds of New England. Second Edition.¹— Mr. Brewster, in his editorial preface, gives a fair and appreciative estimate of the value of Mr. Minot's well-known manual, from which we quote: "The 'Land-Birds and Game-Birds of New England ' is, in many respects, a remarkable and interesting book. Written by a youth of seventeen, with, as I am assured, almost no outside help of either a literary or a scientific kind, it found favor at once, and for nearly twenty years has been ranked among the authorities on the subject of which it treats. It has evidently owed this popularity partly to the large amount of original matter which it contains, partly to the pleasant style in which it is written, and in no small degree, apparently, to the

¹ The | Land-Birds and Game-Birds | of | New England | with Descriptions of the Birds, their Nests | and Eggs, their Habits and Notes | With Illustrations | By | II. D. Minot | Second Edition | Edited by William Brewster | [Motto=4 lines and publishers'monogram] Boston and New York | Houghton, Mifflin and Company | The Riverside Press, Cambridge | 1895. Svo. pp. xxiv + 492, frontispiece, 1 pl., and 22 ill. in text. Cloth, $\$_{3,50}$.

attractive personality of Mr. Minot himself. Most of the biographies relate to his own experience or impressions, and in the main they are exceedingly well done, for, in addition to the essentials of good composition . . . they are not wanting in touches of a somewhat quaint humor and of unmistakably sincere and elevated sentiment. The author had a clear head, a true heart, and a well defined purpose, combined with an amount of literary taste and ability very rare in one so young. He was deeply in earnest, full of warm yet reverent love of nature, wholly unconscious of, or indifferent to, certain conventional methods of investigation and expression, yet in the main careful in observation, temperate of statement, and singularly logical and dispassionate in argument."

As Mr. Brewster further states, Mr. Minot's book "was not, when it first appeared, either a comprehensive or an exhaustive treatise, and to attempt to make it so now, when the sum of knowledge of New England ornithology is at least four-fold what it was in 1877, would tend to obscure, if not to destroy, the original character of the book, besides swelling its bulk to far beyond the limits of desirability." With a proper appreciation of his editorial functions in a case like the present, Mr. Brewster left the original text practically intact, his own additions being made in footnotes distinguished by his initials. The notes and additions given by Mr. Minot in an Appendix have been interpolated in the body of the work as footnotes to the matter to which they relate; a few transpositions of words and sentences have been made, in accordance with marginal notes in Mr. Minot's personal copy of the work, and there have been slight emendations of punctuation. The principal changes beyond this have been to modernize the technical names by substituting those of the A. O. U. Check-List for those originally used, where they were different.

Mr. Brewster's own notes relate mainly to the distribution of the species, and are uniformly supplied for all of the species treated, and are independent of the original text rather than a revision of Mr. Minot's often very inadequate treatment of this part of the subject. This, of course, gives us an annotated list of the Land-Birds and Game-Birds of New England, so far as the latter were covered in the original work, giving their manner of occurrence, so far as at present known, throughout New England. As no higher authority could have been selected for the task, these annotations not only greatly increase the value of the book, but give in a condensed form a summary of the present knowledge of the distribution, migration seasons, and breeding ranges of New England birds, from the Thrushes to the Grallæ, plus two species - the Snipe and the Woodcock -of the latter. Corrections of the comparatively few misstatements in the text are also made in footnotes. Section G of the Appendix, forming pages 466-480, is also by Mr. Brewster, and treats chiefly of species added to the New England list since the publication of the first edition of the work-some 28 in number. This important supplemental matter gives a detailed biography of Bicknell's Thrush; a page is given to the Palm

and Yellow Palm Warblers; another to the Redpolls, and still another to the incursion of Evening Grosbeaks in 1890. The puzzling group of Gyrfalcons is also treated at some length, diagnoses being given of the four forms occurring in New England, with notes on their distribution and a reassignment of the New England records, based on a personal

examination by Mr. Brewster of nearly all the extant specimens. An excellent portrait of the author forms an appropriate frontispiece to the present edition, which also contains a short biographical notice of this remarkable man, who met his death in a railroad accident in Pennsylvania. November 14, 1890. (*Cf.* Auk, VIII, 1891, p. 121).—J. A. A.

Degen on the Evolution of the Bird's Wing.1-Mr. Degen finds his text in a feather of the wing which he terms "carpal covert" and ranks with the major cubital series. It is situated at the carpal joint, its exact position varying in different groups, and is apparently not associated with a remex. A vestigial or plumaceous feather is generally found lying beneath it. The late Mr. Wray called attention to these feathers and considered the former to be a median covert while the vestigial feather he classed as the major covert of the first metacarpal remex,-errors which Mr. Degen corrects. Mr. Degen regards this condition as analagous to aquintocubitalism and predicts that a reduced cubital remex may still be found. Assuming that among archornithic birds all the digits bore remiges he reasons that a subsequent fusion of the metacarpals has resulted in a crowding and consequent decrease in number and readjustment in position of the digital remiges and finds here an explanation of both aquintocubitalism and the vestigial carpal remex.

The paper is a noteworthy contribution to pterylography and should especially appeal to those who seek to find in this branch of ornithology something more than an aid to classification.— F. M. C.

Bulletins 4 and 5 of the Wilson Ornithological Chapter.— Bulletin No. 4² contains the reports of some thirty observers, living in as many different localities, on the manner of occurrence and times of migration of about forty-five species of Warblers. The notes are largely from stations in the upper Mississippi Valley and New England, though one contributor writes from California and another from Texas. *Dendroica kirtlandi* is recorded from Winnebago County, Illinois, May 25, 1894, and there are other records of special interest, while the report as a whole

¹ On Some of the Main Features in the Evolution of the Bird's Wing. By Edward Degen. Bull. Brit. Orn. Club, II, 1894, pp. 33, pl. I, and 6 figs. in text.

² Bulletin No. 4, Wilson Ornithological Chapter of the Agassiz Association. Record of the work for 1893 and 1894 on the Mniotiltidæ. By Lynd Jones, Chairman of the Committee. Oberlin, Ohio, January 15, 1895. 12mo. pp. 22.